

# RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/896, 095A

Source: 1740

Date Processed by STIC: 12/6/04

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS. PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<a href="http://www.uspto.gov/ebc/efs/downloads/documents.htm">http://www.uspto.gov/ebc/efs/downloads/documents.htm</a>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box-1450, Alexandria, VA 22313-1450
- Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
   U.S. Patent and Trademark Office, 220 20<sup>th</sup> Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04

# Raw Sequence Listing Error Summary

	$m_{\alpha}/Q/Q/Q$
ERROR DETECTED	SUGGESTED CORRECTION SERIAL NUMBER: 09/896, 095/
	PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE
I Wrapped Nucleics Wrapped Aminos	The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
·2Invalid Line Length	The rules require that a line not exceed 72 characters in length. This includes white spaces.
3Misaligned Amino Numbering	The numbering under each 5 <sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
4Non-ASCII	The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
5Variable Length	Sequence(s) contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
6PatentIn 2.0 "bug"	A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
7 Skipped Sequences (OLD RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence: (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading) (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown) This sequence is intentionally skipped
	Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
8Skipped Sequences (NEW RULES)	Sequence(s) missing. If intentional, please insert the following lines for each skipped sequence. <210> sequence id number <400> sequence id number 000
9Use of n's or Xaa's (NEW RULES)	Use of n's and/or Xaa's have been detected in the Sequence Listing.  Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
Invalid <213> Response	Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
11Use of <220>	Sequence(s)missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
PatentIn 2.0 "bug"	Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
13 Misuse of n/Xaa	"n" can only represent a single nucleotide; "Xaa" can only represent a single amino acid
-	AMC - Biotechnology Systems Branch - 09/09/2003



IFW16

RAW SEQUENCE LISTING

3 <110> APPLICANT: Ladner, Robert Charles Guterman, Sonia Kosow Roberts, Bruce Lindsay

DATE: 12/06/2004

PATENT APPLICATION: US/09/896,095A

TIME: 14:23:14

Input Set : D:\D0617.70002US09 seq.txt Output Set: N:\CRF4\12062004\1896095A.raw

```
6
                                            Markland, William
                   7
                                            Arthur, Ley Charles
                                            Rachel, Kent Baribault
                 10 <120> TITLE OF INVENTION: DIRECTED EVOLUTION OF NOVEL BINDING PROTEINS
                                                                                                                                                                                                                                   pr 1-8
                 12 <130> FILE REFERENCE: D0617.70002US09
                 14 <140> CURRENT APPLICATION NUMBER: 09/896,095A
                 15 <141> CURRENT FILING DATE: 2001-06-29
                 17 <150> PRIOR APPLICATION NUMBER: 08/993,776
                 18 <151> PRIOR FILING DATE: 1997-12-18
                 20 <150> PRIOR APPLICATION NUMBER: 08/415,922
                                                                                                                                                                                                                        Does Not Comply
                 21 <151> PRIOR FILING DATE: 1995-04-03
                                                                                                                                                                                                          Corrected Diskette Needer
                 23 <150> PRIOR APPLICATION NUMBER: 08/009,319
                 24 <151> PRIOR FILING DATE: 1993-01-26
                 26 <150> PRIOR APPLICATION NUMBER: 07/664,989
                                                                                                                                                                                                                                 Commence of the second 
                 27 <151> PRIOR FILING DATE: 1991-03-01
                 29 <150> PRIOR APPLICATION NUMBER: 07/487,063
                 30 <151> PRIOR FILING DATE: 1990-03-02
32 <150> PRIOR APPLICATION NUMBER: 07/240,160
33 <151> PRIOR FILING DATE: 1988=09-02
E--> 35 <160> NUMBER OF SEQ ID NOS: 261 ? 305? (Sell below)
37 <170> SOFTWARE: PatentIn version 3.3

ERRORED SEQUENCES

E--> 1444 <210> SEQ ID NO: 84

E--> 5271 <210> SEQ ID NO: 225 (Lyuna 244 mining)
E--> 6120 <210> SEQ ID NO: 271 (Lyuna 270 mining)
6854 <210> SEQ ID NO: 305
6855 <211> LENGTH: 5
6856 <212> TYPE: PRT
6857 <213> ORGANISM: Artificial sequence
                 32 <150> PRIOR APPLICATION NUMBER: 07/240,160
                 6857 <213> ORGANISM: Artificial sequence
                 6859 <220> FEATURE:
                 6860 <223> OTHER INFORMATION: synthetic peptide
                 6862 <400> SEQUENCE: 305
                 6864 Met Ala Ile Ser Pro
                 6865 1
 E--> 6866
                                                                 delete
 E--> 6869
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/06/2004 PATENT APPLICATION: US/09/896,095A TIME: 14:23:16

Input Set : D:\D0617.70002US09 seq.txt Output Set: N:\CRF4\12062004\1896095A.raw

## Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:125; Line(s) 2250,2256,2267,2273,2284,2290,2301,2307,2318,2324,2335 Seq#:125; Line(s) 2341,2352,2358 Seq#:128; Line(s) 2460,2466,2477,2483,2494,2500,2511,2517,2528,2534

Seq#:204; Line(s) 4255,4261,4272,4278,4289,4295,4306,4312,4323,4329,4340

Seq#:204; Line(s) 4346

Skipped Sequences (NEW RULES): MUSSING SIGNATURES Sequence (s) missing. If intentional, please use the following format for each skipped sequence.

<210> sequence id number <400> sequence id number 000

Seq#:45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68 Seq#:69,70,71,72,73,74,75,76,77,78,79,80,81,82,83,224,270

<210> 89 <211> 24 <212> (PRT <213> Artificial sequence Lis is hot a reveled ide sequence. Please correct this type I even in subsequent sequences. <220> <223> synthetic oligonucleotide <220> <221> MISC FEATURE (1)..(2) <222> <223> where n can be any nucleotide <220> <221> MISC FEATURE <222> (7)..(8)<223> where n can be any nucleotide <220> <221> MISC FEATURE (10)..(11)<222> <223> where n can be any nucleotide <220> <221> MISC FEATURE <222> (13)..(14)<223> where n can be any nucleotide <220> <221> MISC FEATURE <222> (16)...(17)<223> where n can be any nucleotide <220> <221> MISC FEATURE <222> (22)..(23)<223> where n can be any nucleotide <400> 89

<210> 107

<211> 12 <212> DNA <213> Artificial sequence

<220>

another enoneous designation

09/896,095A 5

<210> <211> <212>	125 76 DNA	
<213>	Artificial sequence	
<220>		
<223>	synthetic oligonucleotide	This is a rucleotide
<220>		( hur ential
<221>	misc feature	100000
<222>	$(21)^{-}$ . $(21)$	sequence
<223>	where nwhere Xaa can be any naturally occurr	ing amino acid with the
follow	wing probabilities:	
	(.26 T, .18 C, .26 A, and .30 G)	. /
		·
		1/

The types of errors shown exist throughout the Sequence Listing. Please check subsequent sequences for similar errors.

09/896,095A 6

		·
<210>	187	
<211>	7	
<212>	PRT	
<213>	Artificial sequence	
\Z13>		/
<220>	^	carrot represent a
<223>	synthetic peptide	1
(2237	XAA	Carre
	/\0(\)	canrol regular. It
·2205	l	than Coolin
<220>	MISC FEATURE	1) Colt
<221>	(5) (5)	1 september 1
<222>	where x is a stop encoded by TAA	can original
<223>	where x is d scot	Carlo and
		stop coden. de can only represent a single arrivo acid
<220>	WIGG FEARIDE	sipple ar
<221>	MISC_FEATURE	$\alpha \beta \omega \cdot 1$
<222>	(6)(6) where x is a stop encoded by TAG	, 0
<223>	where x is a stop theodox 27	<u> </u>
<220>	THE PARTY DE	r
<221>	MISC_FEATURE	$oldsymbol{arphi}$
<222>	(7)(7) where x is a stop encoded by TGA	
<223>	where x is a stop encoded by IGA	The types of errors shown exist throughout
		the Sequence Listing. Please check subsequent
		sequences for similar errors.

09/896,095A7 <210> 260 ) invalid (2137 response - sel tem 10 on Enor Summary Sheet <211> 1302 <400> 260

09/896,095A 8

```
<210>
      285
<211>
      94
<212>
      DNA
<213>
      Artificial sequence
<220>
<223>
      synthetic oligonucleotide
                                        being?
<220>
<221>
     misc_feature
<222>
      (18)...(18)
      where n has an equal probability of bein C or A
<223>
```

#### VERIFICATION SUMMARY

L:85 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0

PATENT APPLICATION: US/09/896,095A

DATE: 12/06/2004 TIME: 14:23:16

Input Set : D:\D0617.70002US09 seq.txt
Output Set: N:\CRF4\12062004\1896095A.raw

```
L:89 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:16
L:139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:143 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:16
L:157 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:162 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:167 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:172 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:177 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:182 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:187 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:3
L:198 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:202 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:16
L:252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:16
L:311 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:315 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16
L:365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:16
L:399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:429 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:599 M:341.W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:629 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:659 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:694 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:764 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:799 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
L:834 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:874 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:16
L:913 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:917 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:16
L:952 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:956 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:16
L:996 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos :0
L:1000 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:16
L:1035 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0
L:1039 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:16
L:1079 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:1083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:16
L:1141 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:0
L:1145 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:16
L:1180 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:0
L:1184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:16
L:1219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:0
L:1223 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:16
```

L:1258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0

### VERIFICATION SUMMARY

PATENT APPLICATION: US/09/896,095A TIME: 14:23:16

DATE: 12/06/2004

Input Set : D:\D0617.70002US09 seq.txt
Output Set: N:\CRF4\12062004\1896095A.raw

```
L:1262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:16
L:1297 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:1301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:16
L:1336 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0.
L:1340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:16
L:1360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:1379 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:1404 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:1444 M:216 E: (34) Seq. #s missing, SEQ ID NOS: 45 thru 83 _
L:1565 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88 after pos.:0
L:1848 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107 after pos.:0
L:2133 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:123 after pos.:0
L:2233 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:124 after pos.:0
L:2367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125 after pos.:0
L:2445 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:127 after pos.:0
L:2543 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:128 after pos.:0
L:2677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:129 after pos.:0
L:3843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:184 after pos.:0
L:3923 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:187 after pos.:0
L:4231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:203 after pos.:0
L:4235 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:203 after pos.:16
L:4239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:203 after pos.:32
L:4355 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:204 after pos.:0
L:4357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:204 after pos.:60
L:4410 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:205 after pos.:0
L:4412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:205 after pos.:60
L:4515 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:208 after pos.:0
L:4519 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:208 after pos.:16
L:4523 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:208 after pos.:32
L:4645 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:209 after pos.:0
L:4647 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:209 after pos.:60
L:4649 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:209 after pos.:120
L:4679 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:210 after pos.:0
L:4791 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:213 after pos.:0
L:4795 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:213 after pos.:16
L:4909 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:214 after pos.:0
L:4911 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:214 after pos.:60
L:4977 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:215 after pos.:0
L:5144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:220 after pos.:128
L:5237 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:222 after pos.:128
L:5271 M:214 E: (33) Seq.# missing, SEQ ID NO:224
L:5948 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:265 after pos.:64
L:6086 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:268 after pos.:128
L:6120 M:214 E: (33) Seq.# missing, SEQ ID NO:270
L:6211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:272 after pos.:64
L:6530 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:285 after pos.:0
L:6532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:285 after pos.:60
L:6592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:286 after pos.:0
```

L:6612 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:287 after pos.:0

#### VERIFICATION SUMMARY

DATE: 12/06/2004 TIME: 14:23:16

PATENT APPLICATION: US/09/896,095A

Input Set : D:\D0617.70002US09 seq.txt
Output Set: N:\CRF4\12062004\1896095A.raw

L:6630 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:288 after pos.:0 L:6866 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:305 L:6869 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:305

L:35 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (261) Counted (264)